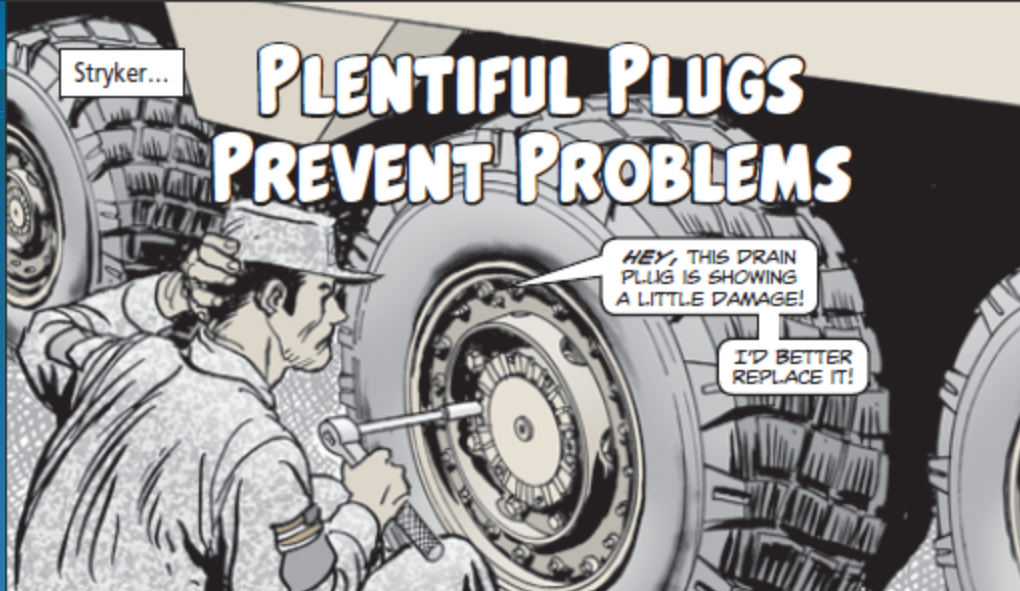


Stryker...

PLENTIFUL PLUGS PREVENT PROBLEMS



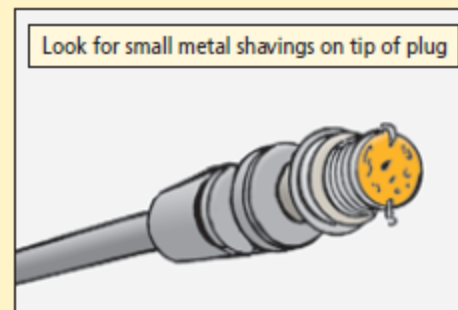
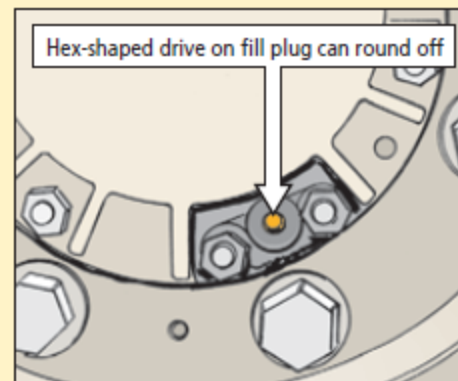
Need to add oil to the wheel hubs on your Stryker? Make sure you take it easy when removing or tightening the hub's filler/drain plugs.

The hex-shaped recessed area of the plug will strip and round off if you're not careful. That makes the plug very hard to install or remove.

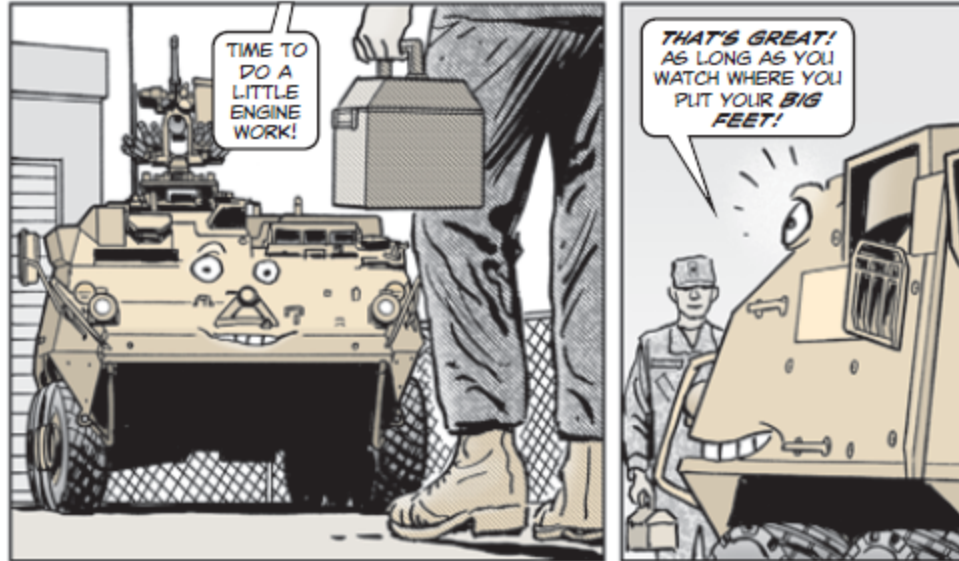
Make sure you insert your wrench all the way into the plug before turning. If you don't, the wrench will slip and the plug is damaged.

It's also a good idea to keep a few extra plugs, NSN 5365-01-157-1347, and gaskets, NSN 5330-12-156-4524, on hand in case one is damaged. A plug and gasket cost less than \$2, so having a replacement is more than worth it if a plug strips while you're in the field.

Once the plug is removed, look at the inside tip. The inside tip of the plug is magnetized, so you may find tiny metal shavings stuck there. Metal shavings could mean wear to the planetary gears in the hub. Tell your mechanic.



PUT YOUR BEST FOOT FORWARD

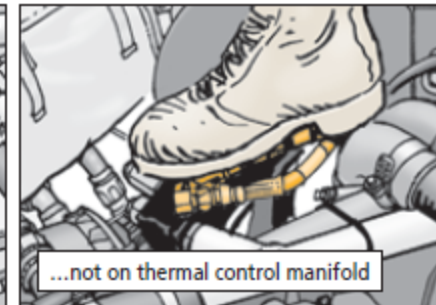
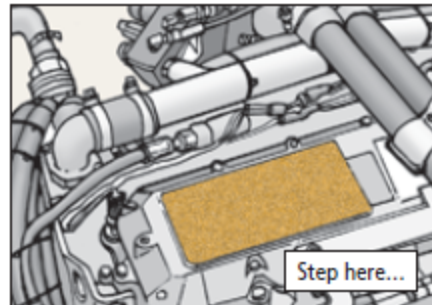


It's only natural, mechanics. When doing repair work in the engine compartment of a Stryker, most of your concentration is on what you're doing with your hands.

But where you place your feet needs attention, too.

A boot in the wrong place—say, on the thermal control manifold—is a big problem. Stepping on the manifold can loosen or even crack the seals on the two quick-disconnect couplings. Then you've got a hydraulic leak to **fix** and a big mess to clean up.

If you need a place to step on the engine, use the non-skid plate just to the side of the manifold of the CAT 3126 engine. Not only does that prevent damage, but you're less likely to slip and hurt yourself.



REDUCE ROLLOVER RISK

IS THE CARGO IN YOUR M114, M151A1, M152A1, M165A1, OR M1167 UP-ARMORED HMMWV WITH FRAG KITS (FKs) 5, 6, AND 7 PILED TOO HIGH?

IS YOUR TRUCK OVER-LOADED?



WILL YOU BE DRIVING YOUR HMMWV ON DEGRADED ROADS?

DOES YOUR HMMWV'S DRIVER LACK TRAINING OR EXPERIENCE?



IF YOU ANSWERED YES TO ANY OF THESE QUESTIONS...

...YOUR ROLLOVER RISK RISES.

Reducing Risk

- Place and secure cargo as low as possible in the vehicle.
- Conduct driver's training.
- Stay within recommended payloads.
- Reduce speed before sharp turns or when road conditions are poor.
- Increase stopping distances when necessary, especially driving through sand, debris, gravel or rain.
- Check tire pressures when your HMMWV hasn't been driven for at least three hours.

YOU CAN REDUCE POTENTIAL ROLLOVERS IF YOU...

AT THE BASIC GROSS VEHICLE WEIGHT (GVW)~12,100 POUNDS-RAPID STEERING INCREASES THE LIKELIHOOD OF A ROLLOVER AT SPEEDS AS LOW AS 35 MPH IN YOUR M114, M151A1, M152A1, M165A1, AND M1167.

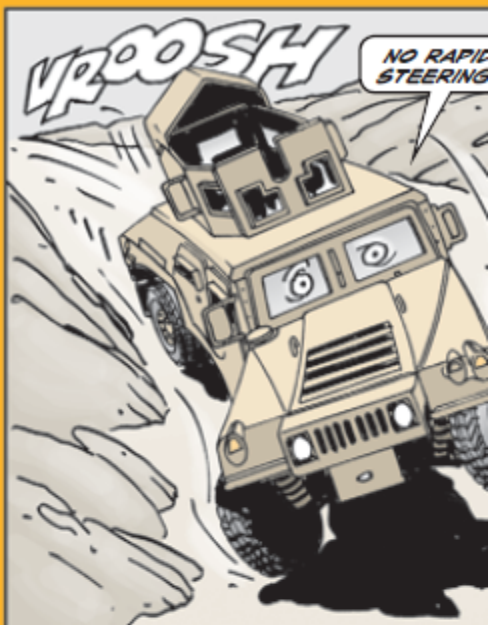
GVW IS BASED ON AN UNLOADED VEHICLE WITH A PAYLOAD OF FOUR CREW MEMBERS WITH BASIC GEAR.



FK 5 ADDS 3,000 POUNDS TO THE GVW; FKs 5 AND 7 ADD 4,000 POUNDS; AND FKs 5 AND 6 ADD 5,000 POUNDS.

THE PRESENCE OF SAND, DEBRIS, GRAVEL AND RAIN REDUCE THE STABILITY OF HEAVIER HMMWVS EVEN MORE.

Heavy Could Be Hazardous



Tire Pressure Formulas for Reduced Rollover

TAKE NOTES! THIS IS GOOD STUFF HERE!!

HMMWVS WITH FK 5 PLUS LOAD RANGE D TIRES/WHEELS EQUALS 50 PSI FRONT/50 PSI REAR TIRE PRESSURE

HMMWVS WITH FK 6 OR 7 PLUS LOAD RANGE D TIRES/WHEELS EQUALS NO GO! (THIS IS NEVER ALLOWED.)

HMMWVS WITHOUT FKs PLUS LOAD RANGE D OR LOAD RANGE E EQUALS 40 PSI FRONT/50 PSI REAR TIRE PRESSURE

HMMWVS WITH FKs 5, 6, OR 7 PLUS LOAD RANGE E WHEELS EQUALS 50 PSI FRONT/65 PSI REAR TIRE PRESSURE

Increase Braking Distance

At 50 mph on smooth, dry pavement, an M1114, M1151A1, M1152A1, M1165A1, or M1167 HMMWV with FKs 5, 6, or 7 has a braking distance up to 14 vehicle lengths. At GVW, the braking distance is ten vehicle lengths. Of course, increased loads and potentially hazardous road conditions further increase stopping distances.

Get more info on this by accessing the related rollover prevention smart card on AKO: <https://www.us.army.mil/>

[suite/collaboration/GetDocument.do?doid=17249275](#)

BOTTOM LINE IS, USE EXTRA CAUTION AND THE GUIDELINES WE JUST GAVE YOU WHEN BEHIND THE WHEEL OF YOUR LIP-ARMORED HMMWVS WITH FK 5, 6, 7, OR ANY COMBINATION.



THAT SHOULD HELP KEEP
YOU AND YOUR BUDDIES
SAFER-AND HOPEFULLY,
ROLLOVER-FREE.

SMART CARD / GTA Frag KR 5 / Frag KR 6 / Frag KR 7

W. A. Janssen

At Gross Vehicle Weight (GVW) rapid clearing action increases
your throughput of a 60-tonner at speeds as low as
38 MPH vs. 30-35 / 10-15 ft. / 10-12 ft. / 10-12 ft. / 10-12 ft. / 10-12 ft.
GVW = 10,000 lbs.

ICM™ is an integrated vehicle from a crew with basic gear!
FWD without wet/dryland exceeds GVW by at least 2000 lbs.
FWD + FCT vehicle with payload exceeds GVW by at least 2000 lbs.
FWD + FWE vehicle with payload exceeds GVW by at least 2000 lbs.

Road conditions such as sand, debris, gravel or rain will vary your vehicle stability.

CONTRIBUTING FACTORS TO RAILROADS

- ¹²² Cargo jacked high in vehicle ¹²³ Drivers inexperience / Lack of Training ¹²⁴ Overloading ¹²⁵ Degraded Road Conditions ¹²⁶

ACTIONS TO REDUCE POTENTIAL ROLL-OVER

- *** Check The Procedures when Times are Good (There will be more advice on how to proceed) ***

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[illegible]

M114/M115A1/M1152A1/M116SA1/M1167

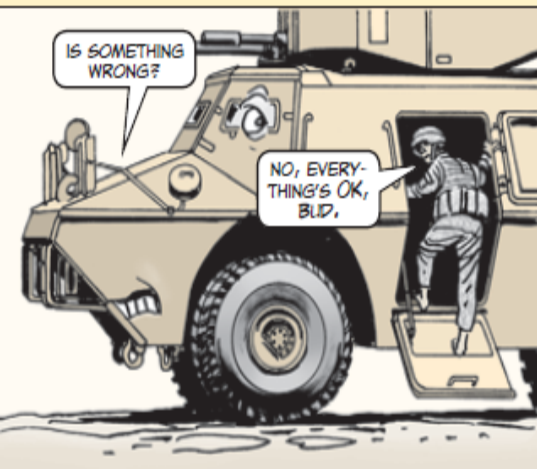
HMM5V

ROLL-OVER PRECAUTION SMART CARD FK5/FK6/FK7



M1117 ASV/Supply Management...

DON'T WAIT! CHECK THE PLATE



PS 686

12

JAN 10

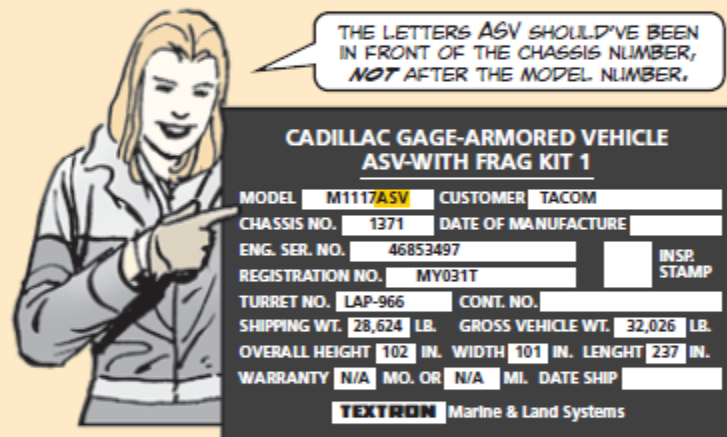
Heads up, Soldiers! Entering an incorrect serial number (SN) from an M1117 Armored Security Vehicle (ASV) data plate into PBUSE can cause a conflict between PBUSE records and the TAMMS Equipment Database (TEDB) Ground Equipment Tracker master records.

Here's the scoop. The **correct** SN has the letters "ASV" and a 3- or 4-digit chassis number (for example, ASV123 or ASV1234). This format should be entered in PBUSE records to ensure compatibility with the TEDB master records.

Confusion occurs because the ASV has two data plates and both are located inside the driver's side door.

One is the standard full identification and specification data plate with a black background. Use this data plate for property book accountability. Note: The chassis number is the serial number on this vehicle.

For example, this data plate below should read "ASV1371". The letters ASV should've been placed in front of the chassis number, **not** after the model number. New equipment data plates will prefix the serial (chassis) number with ASV. The other is a UID data plate with three bar codes. **Caution:** The UID plate's SN is different and entering this SN into PBUSE conflicts with production and government acceptance records.

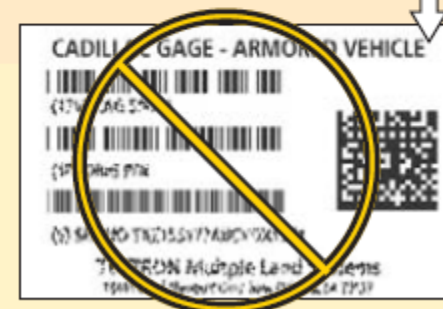


Do **not** use this UID data plate for property book accountability

Tip: The M1117 chassis number is also found on the front-left lift bracket.

- If your ASV's chassis number is 001 through 999, your SN should be 6 characters. Example: ASV849
- If the chassis number is 1000 or above, the SN should be 7 characters long. Example: ASV1371

Anything other than these two formats is **wrong**.



You can verify your ASV's SN and registration number in LOGSA's Logistics Information Warehouse: http://weblog.logsa.army.mil/Veh_reg/main_input.cfm

Enter NIIN 014376957 and click "Submit." Then scroll down to your SN to view the assigned registration number.

Cargo Cover Kits Break-down



HERE ARE THE KIT COMPONENTS...

... FOR EACH AVAILABLE COVER KIT...

ARCTIC 2 1/2-TON CARGO COVER KIT, NSN 2540-01-539-3903.

Qty	Description	NSN
1	Cover assembly	2540-01-460-3487
1	Bow, center	2540-01-564-3669
2	Bow, front or rear	2540-01-564-3372
5	Tube, horizontal (1 1/4-in dia; 72 1/4-in length)	4710-01-564-2565
5	Tube, horizontal (1 1/4-in dia; 76 1/4-in length)	4710-01-564-2778
24	Snap, extension	5325-01-460-7431
1	Pipe, black iron	4710-01-391-3192
3	Strap, tiedown	5340-01-460-6616
6	Strap (1-in width; 27 9/16-in length)	5340-01-436-7620
1	Strap (1-in width; 24-in length)	5340-01-451-8966
26	Snap button	5325-01-569-5453

TAN 2 1/2-TON CARGO COVER KIT, NSN 2540-01-539-3936.

Qty	Description	NSN
1	Cover assembly	2540-01-
1	Bow, center	2540-01-
2	Bow, front or rear	2540-01-
5	Tube, horizontal (1 1/4-in dia; 72 1/4-in length)	4710-01-
5	Tube, horizontal (1 1/4-in dia; 76 1/4-in length)	4710-01-
24	Snap, extension	5325-01-
1	Pipe, black iron	4710-01-
3	Strap, tiedown	5340-01-
6	Strap (1-in width; 27 9/16-in length)	5340-01-
1	Strap (1-in width; 24-in length)	5340-01-
26	Snap button	5325-01-

WOODLAND CAMO 2 1/2-TON CARGO COVER KIT, NSN 2540-01-539-3626.

Qty	Description	NSN
1	Cover assembly	2540-01-
1	Bow, center	2540-01-
2	Bow, front or rear	2540-01-
5	Tube, horizontal (1 1/4-in dia; 72 1/4-in length)	4710-01-
5	Tube, horizontal (1 1/4-in dia; 76 1/4-in length)	4710-01-
24	Snap, extension	5325-01-
1	Pipe, black iron	4710-01-
3	Strap, tiedown	5340-01-
6	Strap (1-in width; 27 9/16-in length)	5340-01-
1	Strap (1-in width; 24-in length)	5340-01-
26	Snap button	5325-01-



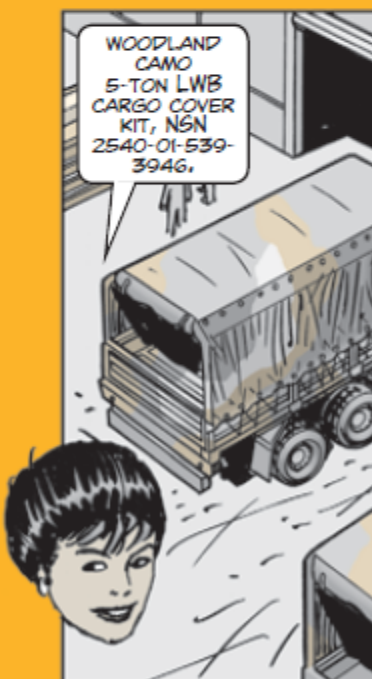
TAN 5-TON LWB
CARGO COVER KIT, NSN
2540-01-539-3588.

Qty	Description	NSN
1	Cover assembly	2540-01-479-5022
2	Bow, center	2540-01-564-3669
2	Bow, front or rear	2540-01-564-3372
5	Tube, horizontal (1 1/4-in dia; 76 1/4-in length)	4710-01-564-2778
5	Tube, horizontal (1 1/4-in dia; 72 1/4-in length)	4710-01-564-2565
5	Tube, horizontal (1 1/4-in dia; 93 1/4-in length)	4710-01-564-2798
24	Snap, extension	5325-01-460-7431
1	Pipe, black iron	4710-01-391-3192
3	Strap, tiedown	5340-01-460-6616
6	Strap (1-in width; 27 9/16-in length)	5340-01-436-7619
1	Strap (1-in width; 24-in length)	5340-01-451-8966
26	Snap button	5325-01-569-5453



TAN 5-TON DUMP
CARGO COVER KIT, NSN
2540-01-539-3638.

Qty	Description	NSN
1	Cover assembly	2540-01-479-5022
1	Bow, front	2540-01-564-3669
1	Bow, center	2540-01-564-3372
1	Bow, rear	2540-01-564-3372
5	Tube, horizontal (1 1/4-in dia; 51 5/8-in length)	4710-01-564-2778
5	Tube, horizontal (1-in dia; 51 5/8-in length)	4710-01-564-2565
5	Tube, horizontal (1 1/16-in dia; 74 1/2-in length)	4710-01-564-2798
24	Snap, extension	5325-01-460-7431
1	Pipe, black iron	4710-01-391-3192
3	Strap, tiedown	5340-01-460-6616
6	Strap (1-in width; 27 9/16-in length)	5340-01-436-7619
1	Strap (1-in width; 24-in length)	5340-01-451-8966
26	Snap button	5325-01-569-5453



WOODLAND CAMO
5-TON LWB
CARGO COVER
KIT, NSN
2540-01-539-3946.

Qty	Description	NSN
1	Cover assembly	2540-01-393-0950
2	Bow, center	2540-01-564-3669
2	Bow, front or rear	2540-01-564-3372
5	Tube, horizontal (1 1/4-in dia; 76 1/4-in length)	4710-01-564-2778
5	Tube, horizontal (1 1/4-in dia; 72 1/4-in length)	4710-01-564-2565
5	Tube, horizontal (1 1/4-in dia; 93 1/4-in length)	4710-01-564-2798
24	Snap, extension	5325-01-460-7431
1	Pipe, black iron	4710-01-391-3192
3	Strap, tiedown	5340-01-460-6616
6	Strap (1-in width; 27 9/16-in length)	5340-01-436-7620
1	Strap (1-in width; 24-in length)	5340-01-451-8966
26	Snap button	5325-01-569-5453

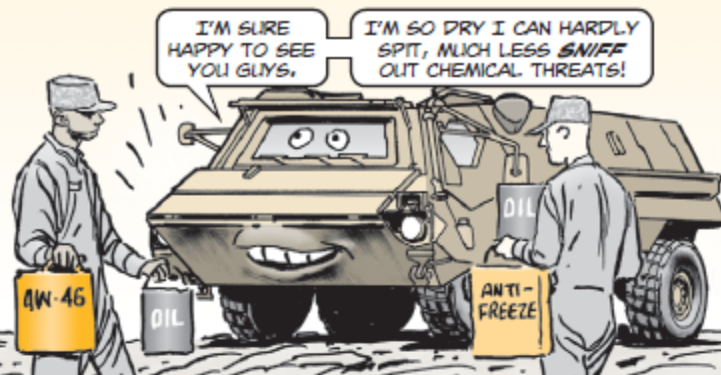


WOODLAND CAMO
5-TON DUMP
CARGO COVER KIT, NSN
2540-01-539-3631.

Qty	Description	NSN
1	Cover assembly	PN 124203
1	Bow, front	2540-01-564-3669
1	Bow, center	2540-01-564-3372
1	Bow, rear	2540-01-564-3372
5	Tube, horizontal (1 1/4-in dia; 51 5/8-in length)	4710-01-564-2778
5	Tube, horizontal (1-in dia; 51 5/8-in length)	4710-01-564-2565
5	Tube, horizontal (1 1/16-in dia; 74 1/2-in length)	4710-01-564-2798
24	Snap, extension	5325-01-460-7431
1	Pipe, black iron	4710-01-391-3192
3	Strap, tiedown	5340-01-460-6616
6	Strap (1-in width; 27 9/16-in length)	5340-01-436-7619
1	Strap (1-in width; 24-in length)	5340-01-451-8966
26	Snap button	5325-01-569-5453

*NSN will be assigned later.

DON'T LET FOX RUN DRY



The Fox can be quite thirsty when it comes to fluids: engine oil, transmission fluid, hydraulic fluid, antifreeze, even grease. If you let your Fox run dry, it will stop in its tracks. Mission missed. Expensive repairs to follow.

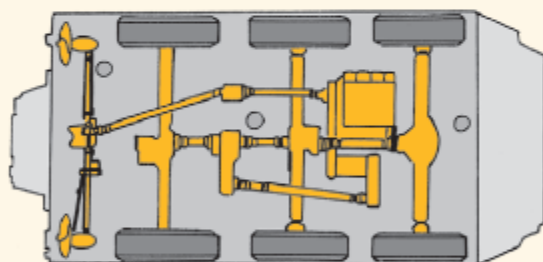
Pay attention to fluids and where they go. Crews sometimes use the wrong fluid or put fluid in the wrong place. All the fluid filler spouts are clearly marked for what they go to. So make sure you don't pour oil or transmission fluid in the radiator. Yes, that has happened! Here's a quick rundown of the fluid checks and what specific fluids are needed:

Axles, power divider, amphibious system. They take GO 80/90. For the axles, the fluid should reach the lower edge of the fill hole. On the planetary gear set cover of the first and second axle, read the fluid level in the window. For the steering knuckles, use the dipstick from your tool bag to measure.

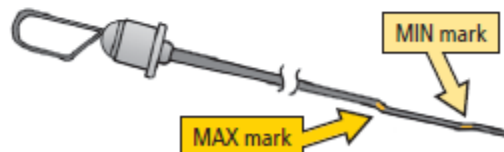
Engine oil. Use OE/HDO-15/40. With the engine off, the reading should be between MIN and MAX. If the engine has been running, wait at least three minutes after shutdown to measure.

Transmission oil. Use OE/HDO-10. The transmission oil should be at MIN level before starting the engine. With the engine idling, the reading should be between MIN and MAX of the first range (30°C). But remember to pay attention to the engine temperature. Read the temperature gauge. The cold range on the dipstick is the lower range (30°C) and the warm range (80°C) is the higher.

Use GO-80/90 on axles, power divider, and amphibious system



Engine oil should be between MIN and MAX



Hydraulics. Do not use cherry juice. You are supposed to use H540, but unfortunately there is none in the supply system. Hydraulic fluid AW46 from your main battle tank can be used instead. Make sure it's not red and it's not petroleum-based. There is no NSN for AW46, but your Fox maintainer can get you all you need.

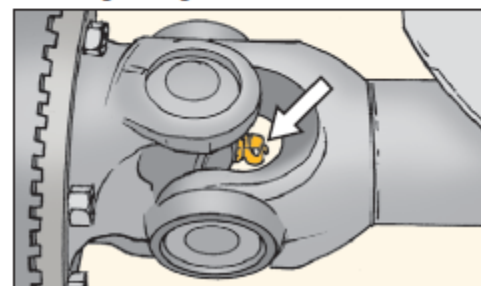
To check hydraulic fluid, turn the main power switch to Position 2 and wait until the electro-hydraulic pump shuts off. The fluid level should be between MIN and MAX.

Brake system. Use H515 brake fluid only. The master cylinder reservoir under the dash should be up to MAX. The system expansion tank behind the driver should be up to MAX. NSN 9150-00-082-7524 gets 10 gallons of H515.

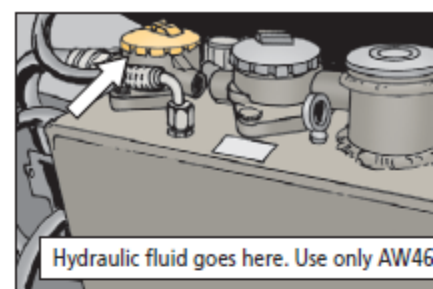
Air brake frost protector. Use denatured alcohol. On the dipstick it should read MIN and MAX. When the locking T-rod is in WINTER (the lower) position, the brake is fed with denatured alcohol and moisture in the air lines does not freeze. During summer, turn the T-rod 90° and let the rod come up.

Cooling system. Use ethylene glycol antifreeze in a mixture of 1/2 antifreeze and water. Check the antifreeze with the engine cold. The level should be within one inch of the sensor in the fill neck. Test the strength of the antifreeze with the antifreeze tester. You don't want the antifreeze too weak or too strong. If it's too weak, the engine could freeze in the cold. If it's too strong, the engine won't be cooled sufficiently in hot weather.

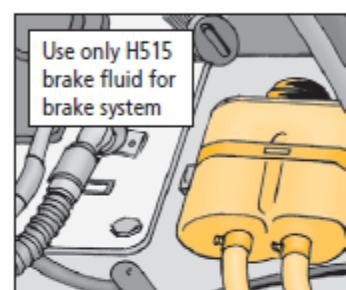
Grease fittings. Use WTR aircraft grease. Use your on-board grease gun because US grease fitting adapters are a bit too big for the Fox fittings. Lube the fittings until grease becomes visible.



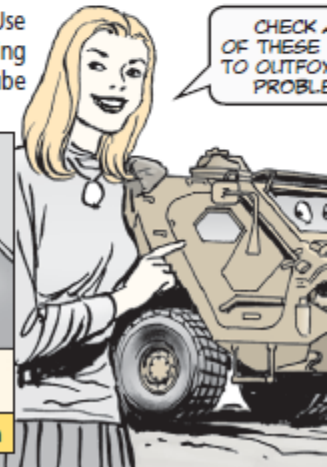
Use WTR aircraft grease for lubing the drive train



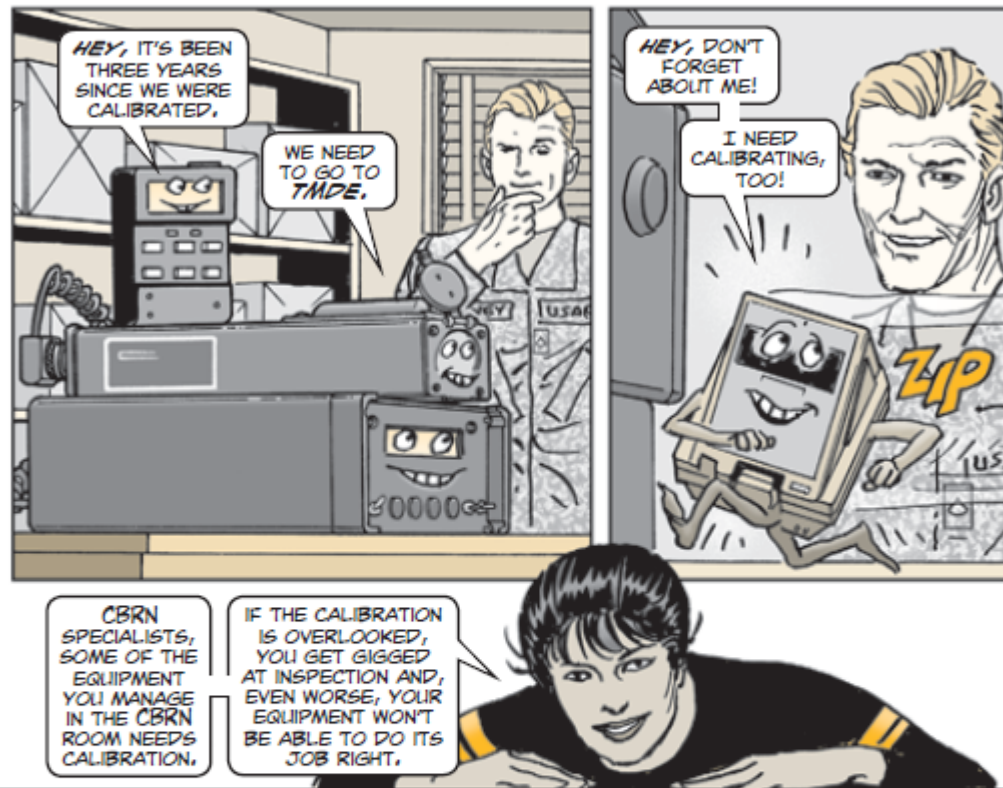
Hydraulic fluid goes here. Use only AW46



Use only H515 brake fluid for brake system



Don't Forget CBRN Calibration



Radiac equipment and PATS are what you need to worry about. The AN/UDR-13, AN/VDR-2, AN/PDR-75, and AN/PDR-77 radiac sets need to be calibrated every three years. The M41 PATS should be calibrated every 18 months. The exception is surety sites, which should have their PATS calibrated every 12 months.

All of the radiac equipment and PATS should have labels that show when they were last calibrated. If they don't, contact your local TMDE and ask them to check when the equipment was last calibrated.

Your unit's SAMS-E system should have had these calibration requirements entered in it so that you would be notified automatically when equipment is due to go to TMDE. The problem is that many units take their equipment out of SAMS-E when they deploy and forget to put it back in when they return. Make sure your equipment is covered by SAMS-E.